

Knox County Code Administration & Inspection

Smoke & Carbon Monoxide Alarms



REV.022019

Smoke Detection and Notification. All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm systems shall provide the same level of smoke detection and alarm as required by this section for smoke alarms in the event the fire alarm panel is removed or the system is not connected to a central station.

Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms. (Within twenty (20) feet of bedroom door per Knox County Building Official).
3. On each additional story of the dwelling, including basements and habitable attics but not including crawl space and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. In each garage or storage area with a six foot or wider door to the outside. These smoke alarms shall be specifically approved for use in garages in the manufacturers written instructions.
Exception: Heat detectors interconnected with the alarm system and having battery back up may be used in a garage or storage area.
5. Smoke detectors shall be placed in all new additions or renovations.

When more than one smoke alarms is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

Carbon Monoxide Alarms

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel fired appliances are installed and in dwelling units that have attached garages.

- All smoke detectors must be series hard wired with A/C and have battery back up. If hard wired smoke detectors cannot be installed, wireless interconnected smoke detectors are acceptable.
- A smoke detector must be installed in all attached garages.
- Mount all smoke detectors high on walls or ceilings. Flat ceiling mounted alarms should be installed at least four inches away from the nearest wall; wall-mounted alarms should be installed four to 12 inches away from ceiling.
- If mounted on pitched ceilings, install alarm within 12 inches of the ceilings highest point.
- Alarms must be at least 3 foot away from all HVAC air registers and HVAC returns.

NOTE: FOLLOW ALL MANUFACTURES INSTALLATION INSTRUCTIONS INCLUDED WITH THE PURCHASE OF ALL SMOKE ALARMS.